Mario J Kriegel

List of Publications by Year
in descending order

40 papers	945 citations	516710 16 h-index	454955 30 g-index
41 all docs	41 docs citations	41 times ranked	650 citing authors

#	Article	IF	Citations
1	Binary Tiâ€“Fe system. Part II: Modelling of pressure-dependent phase stabilities. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2022, 76, 102383.	1.6	5
2	Thermodynamic re-modelling of the Cuâ€“Nbâ€“Sn system: Integrating the nausite phase. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2022, 77, 102409.	1.6	4
3	Thermodynamics of martensite formation in Feâ€“Mnâ€“Alâ€“Ni shape memory alloys. Scripta Materialia, 2021, 192, 26-31.	5.2	14
4	Functionally graded structures realized based on Feâ€“Mnâ€“Alâ€“Ni shape memory alloys. Scripta Materialia, 2021, 194, 113619.	5.2	10
5	Nanoscale twinning in Feâ€“Mnâ€“Alâ€“Ni martensite: a backscatter Kikuchi diffraction study. Journal of Applied Crystallography, 2021, 54, 54-61.	4.5	8
6	Nanoscale twinning and superstructures of martensite in the Feâ€“Mnâ€“Alâ€“Ni system. Materialia, 2021, 16, 101062.	2.7	5
7	Binary Tiâ€“Fe system. Part I: Experimental investigation at high pressure. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2021, 74, 102322.	1.6	6
8	In situ characterization of the functional degradation of a <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1.svg"><mml:mrow><mml:mo>[</mml:mo><mml:mrow><mml:mn>00</mml:mn><mml:mover accent="true"><mml:mn>1</mml:mn><mml:mo>Â¯</mml:mo></mml:mover></mml:mrow><mml:mo>]</mml:mo></mml:mrow></mml: orientated Feâ€“Mnâ€“Alâ€“Ni single crystal under compression using acoustic emission measurements. Acta Materialia, 2021, 220, 117333.	7.9	10
9	Formation of the Ï‰ Phase in the Titaniumâ€”Iron System under Shear Deformation. JETP Letters, 2020, 111, 568-574.	1.4	65
10	Formation and Thermal Stability of Ï‰-Ti(Fe) in Î±-Phase-Based Ti(Fe) Alloys. Metals, 2020, 10, 402.	2.3	12
11	An orthorhombic D022-like precursor to Al8Mo3 in the Alâ€“Moâ€“Ti system. Journal of Alloys and Compounds, 2020, 823, 153807.	5.5	7
12	Experimental Investigations of the Fe-Mn-Ti System in the Concentration Range of up to 30Âat.% Ti. Journal of Phase Equilibria and Diffusion, 2020, 41, 457-467.	1.4	9
13	The ternary Alâ€“Moâ€“Ti system revisited: Phase equilibria of Al63(Mo,Ti)37. Journal of Alloys and Compounds, 2019, 811, 152055.	5.5	7
14	Thermodynamic assessment and experimental investigation of the systems Alâ€“Feâ€“Mn and Alâ€“Feâ€“Mnâ€“Ni. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 66, 101621.	1.6	19
15	Promoting abnormal grain growth in Fe-based shape memory alloys through compositional adjustments. Nature Communications, 2019, 10, 2337.	12.8	79
16	Thermodynamic and physical properties of Zr3Fe and ZrFe2 intermetallic compounds. Intermetallics, 2019, 109, 189-196.	3.9	14
17	Thermal Stability of Athermal Ï‰â€Ti(Fe) Produced upon Quenching of Î²â€Ti(Fe). Advanced Engineering Materials, 2019, 21, 1800158.	3.5	14
18	Thermodynamic assessment and experimental investigation of the Alâ€“Mnâ€“Ni system. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 64, 78-89.	1.6	10

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19	On the microstructural and functional stability of Fe-Mn-Al-Ni at ambient and elevated temperatures. Scripta Materialia, 2019, 162, 442-446.	5.2	27
20	Transformation Pathway upon Heating of Tiâ€“Fe Alloys Deformed by Highâ€Pressure Torsion. Advanced Engineering Materials, 2018, 20, 1700933.	3.5	23
21	The Î±â†'Ï‰ and Î²â†'Ï‰ phase transformations in Tiâ€“Fe alloys under high-pressure torsion. Acta Materialia, 2018, 144, 337-351.	7.9	118
22	Effect of Melt Conditioning on Removal of Fe from Secondary Al-Si Alloys Containing Mg, Mn, and Cr. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2018, 49, 6375-6389.	2.2	15
23	High temperature phase equilibria in the Ti-poor part of the Alâ€“Moâ€“Ti system. Journal of Alloys and Compounds, 2017, 706, 616-628.	5.5	6
24	Transformations of Î±' martensite in Tiâ€“Fe alloys under high pressure torsion. Scripta Materialia, 2017, 136, 46-49.	5.2	44
25	High-temperature phase equilibria with the bcc-type Î² (AlMo) phase in the binary Alâ€“Mo system. Intermetallics, 2017, 83, 29-37.	3.9	12
26	Cyclic Degradation Behavior of $$ langle 001 angle $$ âŸ¨ 001 âŸ© -Oriented Feâ€“Mnâ€“Alâ€“Ni Single Crystals in Tension. Shape Memory and Superelasticity, 2017, 3, 335-346.	2.2	22
27	Experimental investigation of phase relations and thermodynamic properties in the system ZrO 2 â€“Eu 2 O 3 â€“Al 2 O 3. Journal of the European Ceramic Society, 2016, 36, 1455-1468.	5.7	4
28	Cyclic degradation in bamboo-like Feâ€“Mnâ€“Alâ€“Ni shape memory alloys â€" The role of grain orientation. Scripta Materialia, 2016, 114, 156-160.	5.2	61
29	Phase Transformations in Tiâ€“Fe Alloys Induced by Highâ€Pressure Torsion. Advanced Engineering Materials, 2015, 17, 1835-1841.	3.5	95
30	New experimental investigations of phase relations in the Yb2O3â€“Al2O3 and ZrO2â€“Yb2O3â€“Al2O3 systems and assessment of thermodynamic parameters. Journal of the European Ceramic Society, 2015, 35, 2855-2871.	5.7	9
31	Thermophysical properties of pyrochlore and fluorite phases in the Ln2Zr2O7â€“Y2O3 systems (Ln = La,) Tj ETQq1 1 0.784314 rgBT / Sm2Zr2O7â€“Y2O3. Journal of Alloys and Compounds, 2015, 625, 200-207.	5.5	10
32	Specific Heat Capacity Measurements of Intermetallic Phases in the Ternary Al-Ti-Cr System. Journal of Phase Equilibria and Diffusion, 2014, 35, 658-665.	1.4	4
33	Constitution of the liquidus and solidus surfaces of the Alâ€“Tiâ€“Cr system. Journal of Alloys and Compounds, 2014, 584, 438-446.	5.5	5
34	Thermophysical properties of pyrochlore and fluorite phases in the Ln2Zr2O7â€“Y2O3 systems (Ln=La,) Tj ETQq0 0 0 rgBT /Overlock 10 Compounds, 2014, 586, 118-128.	5.5	19
35	Phase equilibria at 1473K in the ternary Alâ€“Crâ€“Ti system. Journal of Alloys and Compounds, 2013, 550, 519-525.	5.5	8
36	Heat capacity for the Eu2Zr2O7 and phase relations in the ZrO2â€“Eu2O3 system: Experimental studies and calculations. Thermochimica Acta, 2013, 558, 74-82.	2.7	22

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37	Effective Temperature of High Pressure Torsion in Zr-Nb Alloys. High Temperature Materials and Processes, 2012, 31, .	1.4	20
38	Phase transformations in the severely plastically deformed Zrâ€“Nb alloys. Materials Letters, 2012, 81, 225-228.	2.6	61
39	Thermodynamic assessment of the Crâ€“Ti and first assessment of the Alâ€“Crâ€“Ti systems. Intermetallics, 2011, 19, 1222-1235.	3.9	32
40	Calorimetric investigation of the La2Zr2O7, Nd2Zr2O7, Sm2Zr2O7 and LaYO3 compounds and CALPHAD assessment of the La2O3â€“Y2O3 system. Thermochimica Acta, 2011, 526, 50-57.	2.7	30